

Perspectives in Veterinary Medicine

Dr. Otto Stader and One Health

By Dr. Donald F. Smith

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“Metal splints for broken leg bones, originally invented by a veterinary (sic) for use on dogs, have proved so effective in treating human fractures that the U.S. Navy is now buying 1,000 of them a month.”

So reported *Time* magazine in 1942, two months before Pearl Harbor, to inform the public that a veterinarian by the name of Otto Stader had developed an external fixation device that had been successfully adapted for use in people.¹

German by birth, Otto Stader immigrated to the US with his parents at the age of six. He attended Penn State University as an undergraduate, then the University of Pennsylvania, where he received his VMD in 1918. A general practitioner who had already advanced the field of bovine reproduction early in his career, Stader opened a small animal practice in Ardmore, Pennsylvania, in 1936² and turned his attention to advances in small animal practice, including developing the external splint system to stabilize long bone fractures in dogs.

During my 2007 interview with Dr. Joseph Merenda, who practiced on West 53rd Street in Manhattan in the 1930s and 1940s, he talked about the development of surgery in that practice, owned by the famous C.P. Zepp. He told me how they admitted dogs with fractures, took radiographs and then operated on them. “We had Stader splints,” Dr. Merenda told me, adding that Stader even came to their practice in New York City and demonstrated how to use them on one of their patients.³

The use of the splint in dogs was discovered by two human surgeons (Drs. Kenneth Lewis and Lester Breidenbach) working at Bellevue Hospital in New York. They adapted the technique for use in people and their seminal paper with co-authorship by Dr. Stader was published in the *Annals of Surgery* in 1942.⁴

The Stader Reduction Splint was successfully used as a substitute for plaster casts in long bone fractures by the United States Navy during WWII. It also became the prototype for other skeletal fixation devices, “although Stader’s contribution to their development is often ignored.”⁵



Dr. Joseph J. Merenda told me that Dr. Stader demonstrated the use of his splint on a dog with a fracture at C. P. Zepp's New York City veterinary practice where he worked in the 1930s.

(Photo by the author, 2007.)

The 50th anniversary booklet produced by the American Animal Hospital Association (AAHA) in 1983 contains the following reference to Otto Stader VMD 1918. "Dr. Otto Stader is sometimes considered a charter member [of the AAHA] although he joined the group at a later time [later than 1933]."⁶ That's unfortunate, because with the possible exception of the AAHA's first president, Mark Morris Sr., there was certainly no other early member of the organization whose contributions to veterinary medicine and human medicine were so important. Dr. Stader did serve as president of the AAHA in 1941-42.

Addendum:

Dr. Stader died in 1962.⁷ His son (Robert M., deceased 2005) and grandson (Alan C.) also became veterinarians, graduating from the Ohio State University and the University of Pennsylvania in 1946 and 1990, respectively.

¹ Medicine: Dog Splint for Human Legs. Time Magazine, October 12, 1942.

² Ardmore Animal Hospital in suburban Philadelphia, Pennsylvania.

³ Merenda, Joseph J. (retired practitioner in New York City, now deceased). Interview with Donald F. Smith (Cornell University), 2007 Aug 7. <http://hdl.handle.net/1813/12877>

⁴ Lewis, Kenneth M, Breidenbach, Lester and Stader, Otto. The Stader Reduction Splint for Treating Fractures of the Shafts of the Long Bones. Ann Surg 1942 October. 116(4) 623-636.

⁵ Lewis, Kenneth, et al. The Stader Reduction Splint for Treating Fractures of the Shafts of the Long Bones. Clin Orth Related Res 1993. 293() 3-7.

⁶ 80 Years Ago: AAHA vs the AVMA. *Perspectives in Veterinary Medicine*. July 2, 2013.

⁷ Dr. Otto Stader. Findagrave.com

KEYWORDS:

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TOPIC:

One Health

ABOUT THE AUTHOR:

Dr. Donald F. Smith, Dean Emeritus of the Cornell University College of Veterinary Medicine, had a passion for the value of the history of veterinary medicine as a gateway for understanding the present and the future of the profession.

Throughout his many professional roles from professor of surgery, to Department Chair of Clinical Sciences, Associate Dean of Education and of Academic Programs and Dean, he spearheaded changes in curriculum, clinical services, diagnostic services and more. He was a diplomat of the American College of Veterinary Surgeons and a member of the National Academy of Practices. Most recently he played a major role in increasing the role of women in veterinary leadership.

Perspectives in Veterinary Medicine is one of his projects where he was able to share his vast knowledge of the profession.